

REMARKS/ARGUMENTS

Applicants respectfully request reconsideration of the prior art rejections set forth by the Examiner under 35 U.S.C. sections 102 and 103. Applicants respectfully submit that the prior art references of record, whether considered alone, or in combination, fail to either teach or suggest Applicants' presently claimed invention. More specifically, by this amendment, Applicants have modified each of the independent claims to further highlight the differences between the present invention and the prior art.

In contrast with the prior art, the present invention is directed to a thermally integrated load and fuel cell structure wherein an electronic device that receives electrical power from the fuel cell generates heat that is transferred back to the fuel cell. The thermal integration of these two distinct devices advantageously aids in cooling of an electronic device such as, for example, a CPU or graphics processing unit of a computer. Those skilled in the art will readily appreciate that other electronic devices which inherently generate heat may also be thermally integrated with a fuel cell device as disclosed and claimed in the instant application.

In contrast with the present invention, the Leboe prior art reference is merely directed to a system and method for regulating the temperature of a self-contained fuel cell apparatus. As noted in the abstract of this reference, the invention of Leboe is particularly suited for self-contained hybrid power supply applications, for example for non-road electric vehicles. Leboe specifically states

in paragraph 38 that as used in the Leboe reference, the term self-contained means that the apparatus is housed within a discrete physical space and is constrained to transfer its thermal load to the surrounding environment only. "In other words the apparatus is not thermally integrated with the load or any other external system with which it is operatively connected."

This stands in sharp contrast with the present invention wherein thermal integration is the crux of the invention. The inventors of the instant application have recognized that by thermally integrating a fuel cell into an electronic device having components which inherently generate heat, the residual heat from these devices may be used in the operation of the fuel cell by thermally integrating the two devices. Leboe actually teaches away from the instant innovation by indicating that there should be no thermal integration.

In order to further highlight these distinctions, Applicants have further modified each of the independent claims to additionally require that: the electronic device performing operations that are not related to the generation or transfer of electrical energy from the fuel cell, wherein the electronic device is a thermally integrated load of the fuel cell. Applicants respectfully submit that the prior art references of record do not teach or suggest these advantageous features of the instant invention.

Accordingly, in light of the foregoing, Applicant's respectfully submit that all claims now stand in condition for allowance.

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The Commissioner is hereby authorized to charge any fees due or to credit any overpayment to Deposit Account No. 50-3891.

Respectfully submitted,

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